

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A line start reluctance synchronous motor comprising:

a single phase stator arranged at an inner circumferential surface of a motor body and on which a main coil and a sub coil are wound;

a magnet unit free-rotatably arranged along an inner circumferential surface of the stator in order to maintain an air gap with the stator; and

a cage rotor provided with a rotation shaft at a center portion thereof to be rotatable along an inner circumferential surface of the magnet unit, wherein the cage rotor includes:

a number of poles; and

a plurality of first magnetic barriers, the number of the magnetic barriers being equal to the number of poles of the cage rotor.
2. (Previously Presented) The line start reluctance synchronous motor of claim 14, wherein the magnetic barriers are formed with a certain interval at an outer side surface of the cage rotor.
3. (Original) The line start reluctance synchronous motor of claim 2, wherein a salient is formed between the magnetic barriers.
4. (Previously Presented) The line start reluctance synchronous motor of claim 14, wherein the magnetic barriers are formed with a certain interval at an inner side surface of the cage rotor.

5. (Original) The line start reluctance synchronous motor of claim 4, wherein the magnetic barriers are formed as a circular arc shape.

6. (Original) The line start reluctance synchronous motor of claim 5, wherein the magnetic barriers become larger towards a circumferential direction of the cage rotor.

7. (Currently Amended) ~~The line start reluctance synchronous motor of claim 1~~ The line start reluctance synchronous motor of claim 1 ~~A line start reluctance synchronous motor comprising:~~

a single phase stator arranged at an inner circumferential surface of a motor body and on which a main coil and a sub coil are wound;

a magnet unit free-rotatably arranged along an inner circumferential surface of the stator in order to maintain an air gap with the stator; and

a cage rotor provided with a rotation shaft at a center portion thereof to be rotatable along an inner circumferential surface of the magnet unit, wherein the cage rotor includes:

a number of poles;

a plurality of cage bars at a peripheral portion thereof;

a plurality of first magnetic barriers located at an outer circumferential surface of the cage rotor, the number of the first magnetic barriers being equal to the number of poles of the cage rotor; and

a plurality of second magnetic barriers located at an inner side surface of the cage rotor, the number of the second magnetic barriers being equal to the number of poles of the cage rotor.

8. (Previously Presented) The line start reluctance synchronous motor of claim 7, wherein the second magnetic barriers are formed as a circular arc shape.

9. (Previously Presented) The line start reluctance synchronous motor of claim 8, wherein the second magnetic barriers become larger towards a circumferential direction of the cage rotor.

10. (Previously Presented) The line start reluctance synchronous motor of claim 8, wherein the first magnetic barriers are formed with as a V shape.

11. (Previously Presented) The line start reluctance synchronous motor of claim 10, wherein a salient is formed between the first magnetic barriers.

12. (Previously Presented) The line start reluctance synchronous motor of claim 7, wherein the first magnetic barriers are formed with as a V shape.

13. (Previously Presented) The line start reluctance synchronous motor of claim 12, wherein a salient is formed between the first magnetic barriers.

14. (Currently Amended) ~~The line start reluctance synchronous motor of claim 1, The line start reluctance synchronous motor of claim 1, A line start reluctance synchronous motor comprising:~~

a single phase stator arranged at an inner circumferential surface of a motor body and on which a main coil and a sub coil are wound;

a magnet unit free-rotatably arranged along an inner circumferential surface of the stator in order to maintain an air gap with the stator; and

a cage rotor provided with a rotation shaft at a center portion thereof to be rotatable along an inner circumferential surface of the magnet unit, wherein the cage rotor includes:

a number of poles;

a plurality of cage bars at a peripheral portion thereof; and

a plurality of magnetic barriers, the number of the magnetic barriers being equal to the number of poles of the cage rotor.